FIRE ENGINEER

DEFINITION

To operate and maintain a variety of fire apparatus and firefighting equipment, to participate in firefighting activities, fire prevention inspections, and training; to perform mechanical maintenance on vehicles, equipment, and apparatus.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from a Fire Captain or Fire Lieutenant.

Exercises technical supervision over other professional firefighters with respect to the operation and maintenance of vehicles, equipment, and apparatus.

EXAMPLES OF DUTIES - Duties may include, but are not limited to, the following:

Drive assigned apparatus to alarms, stage and spot apparatus at the proper location for maximum utilization and efficiency and competently operate and maintain fire apparatus and equipment.

Operate and oversee the use of numerous types of vehicles, equipment, tools, and apparatus.

Lay hose lines, obtain water supply, operate pumping, hydraulic, and other mechanical systems/equipment.

Inspect vehicles, equipment, and apparatus; perform cleaning, maintenance and minor repair work; identify the need for major repairs, perform daily, weekly, and annual performance checks and tests.

Assist with training personnel in the operation and maintenance of vehicles, equipment, and apparatus.

Respond to emergency calls to protect life and property; fight fires, provide medical assistance, and perform rescue operations, and perform salvage and overhaul.

Participate in fire inspections and other fire prevention activities.

Assist paramedics on medical emergencies.

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EXAMPLES OF DUTIES

Participate in drills and other training activities.

Serve as Fire Officer in his absence.

Participate in station maintenance and repair work.

Prepare reports with respect to work operations.

Operate radio equipment.

Perform supplemental tasks related to community service programs such as conducting public fire education tours, issuing bicycle licenses, blood pressure screening, and voter registration.

Perform related duties as assigned.

QUALIFICATIONS

Knowledge of:

Principles, practices, and procedures of modern firefighting and protection of lives and property.

Principles of mechanics, hydraulics, and mathematics as related to Fire Engineer duties.

First aid, C.P.R., EMT-1 standards and techniques and other basic medical assistance techniques.

Purposes and uses of a variety of vehicles, equipment, tools, and apparatus used in firefighting, rescue, and medical assistance operations.

Defensive driving techniques.

Street numbering sequences, topography, water supply, locations of fire department connections at protected properties, target hazards, and general building construction characteristics within assigned district.

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Knowledge of:

Departmental training material and standard operating procedures.

Federal, State, and city rules and regulations governing motor vehicles, safety, and fire prevention.

Ability to:

Demonstrate physical endurance, agility, strength, and stamina in the performance of hazardous tasks under emergency conditions.

Demonstrate a high degree of mechanical aptitude.

Effectively and safely drive and operate the full range of fire apparatus and equipment used by the department.

Perform field calculations of hydraulics for the proper and effective operations of equipment at emergency scenes.

Think and act quickly in emergencies.

Understand and follow oral and written directions promptly and accurately.

Deal courteously and effectively with the general public.

Establish and maintain cooperative relationships with those contacted in the course of work.

Meet professional performance objectives.

Experience and Education:

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

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Experience:

Two years of paid full-time experience as a Firefighter in the City of Milpitas.

Education:

Equivalent to completion of the twelfth grade supplemented by the following four courses satisfactorily completed at an accredited community college.

- 1. Fireground Hydraulics
- 2. Fundamentals of Fire Protection and Equipment
- 3. Fundamentals of Apparatus and Equipment Systems Maintenance
- 4. EMT-1

(Courses equivalent in content can be considered for acceptance.)

License or Certificate

Possession of or ability to obtain and maintain, an appropriate, valid California Driver's License.

Possession of a valid EMT-1 certification at time of appointment and maintenance of said certification thereafter.